

### REMARKS

In the Office Action dated May 13, 2003, claims 1-20 are pending. Claims 1 and 16 have been amended. Claims 1, 11, 16, and 19 are independent claims from which all other claims depend therefrom.

Claims 1-20 stand rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The Examiner questions how the limitation of inhibiting the resume speed of the vehicle, which is contained within the systems and methods of claims 1-20, is capable of being performed without the limitation of setting the speed of the vehicle.

Applicants submit that although a limitation is not recited or explicitly stated within a claim, that does not imply that the limitation cannot be also performed in combination with the existing limitations. The limitation of inhibiting a resume speed may correspond with a single set speed, as the Examiner suggests, multiple set speeds, a variable set speed, a speed set by the vehicle operator or by a vehicle controller, or other set speeds known in the art. A set or desired speed may be determined after the speed of the vehicle has been inhibited, in which case a set speed would not exist before or be required to inhibit resume speed of the vehicle. For example, the controller of the vehicle may when inhibiting a resume speed prevent the vehicle from accelerating whether or not a resume speed is set. A resume speed may be set after resume speed of the vehicle has been inhibited. A vehicle operator may set a resume speed or adjust a set speed after resume speed of the vehicle has been inhibited. Thus, it is not necessary to include the limitation of setting the speed, nor is the stated limitation necessary for the performance of inhibiting a resume speed. Applicants submit that claims 1-20 are now in a condition for allowance, at least with respect to 35 U.S.C. 112.

Claims 11 and 19 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kanazawa et al. (USPN 4,552,239). Claims 11 and 19 have similar limitations and will therefore be discussed together.

Claims 11 and 19 recite a method and system for adaptively controlling the speed of a vehicle. Yaw rate of the vehicle is sensed and in response thereto a yaw rate signal is generated. The resume speed of the vehicle is inhibited in response to the yaw rate signal. The method and system of claims 11 and 19 allow, for example, a vehicle controller to inhibit resume speed of the vehicle when driving on a curved road. In so doing, the controller prevents the host vehicle from accelerating when a target vehicle is no longer detected due to curvature of the road, thereby, preventing a collision between the host vehicle and the target vehicle.

The Office Action further states that Kanazawa teaches how to reduce the vehicle speed based on the yaw rate. Applicants submit that reduction of the vehicle speed is not the same as inhibition of the resume speed. When inhibiting resume speed, acceleration of the vehicle is inhibited. In inhibiting acceleration of the vehicle, vehicle speed is not necessarily reduced. Also, Kanazawa does not teach or suggest reducing vehicle speed in response to yaw rate. Kanazawa discloses a method of determining steering angle for rear wheels of a four-wheel steering device of a vehicle. The Office Action refers to col. 5, lines 20-24, which discloses that the rear wheel turning angle is reduced when the vehicle speed is decreased in turn increasing the yaw rate of the vehicle. Kanazawa adjusts the steering angle in response to the speed of the vehicle. Kanazawa does not adjust the speed of the vehicle in response to the steering angle or in response to the yaw rate of the vehicle.

The Office Action correctly states that Kanazawa does not teach the use of a controller to sense the yaw rate. Kanazawa does not teach use of a yaw rate sensor, generation of a yaw rate signal, and use of a controller to inhibit the

resume speed of the vehicle in response to the yaw rate signal. Thus, claims 11 and 19 are novel, nonobvious, and are now in a condition for allowance.

Claims 1 and 16 stand rejected under 35 U.S.C. 103(a) as being unpatentable over Kageyama et al. (USPN 6,246,932). Claims 1 and 16 have similar limitations and will therefore be discussed together.

Claims 1 and 16 recite a method and system for adaptively controlling the speed of a vehicle. An object is detected and an object profile is generated. A navigation signal is generated by a navigation system. A future path of the vehicle is determined in response to the navigation signal. An in-vehicle controller generates a predicted future path profile in response to the future path and the object profile. Resume speed of the vehicle is inhibited in response to the predicted future path profile.

Kageyama is directed towards a vehicle monitor for controlling movements of multiple vehicles. Multiple vehicles are controlled from a remotely located monitoring station via communication signals transmitted and received between the monitoring station and the vehicles. Kageyama does not teach or suggest the use of an in-vehicle controller for adaptively controlling speed of a vehicle. In Kageyama, vehicle control signals are transmitted from the monitoring stations to the vehicles.

The Office Action states that Kageyama teaches detecting a future path of the vehicle and refers to col. 11, lines 11-17. Kageyama does not teach or suggest detecting a future path of a vehicle via a navigation system, and the navigation system being coupled to an in-vehicle controller. Kageyama discloses controlling a vehicle to follow a planned or predetermined traveling path. The monitoring station signals the vehicle to follow the predetermined traveling path, which is determined by the monitoring station. The monitoring station does not detect a future path of the vehicle in response to a navigation signal, such as one generated by a global positioning system. The monitoring station simply directs

a vehicle of concern to follow a predetermined path in response to relative location of other monitored vehicles.

The Office Action states that Kageyama teaches generating a predicted future path profile in response to the future path and the object profile and refers to col. 11, lines 26-30, which also discloses a planned traveling path. Kageyama does not generate a predicted future path profile, but rather follows a predetermined traveling path. The controllers of claims 1 and 16, of the present invention, generate a predicted future path profile in response to a currently detected future path of the vehicle not in response to a predetermined traveling path. Note that the Office Action refers to a predetermined traveling path for both the future path and the predicted future path profile, which as defined by the present invention are not the same.

The Office Action further states that Kageyama teaches inhibiting the speed of the vehicle in response to the predicted future path profile. Since Kageyama does not teach or suggest detection of a future path or the generation of a predicted future path profile of a vehicle, Kageyama also does not teach or suggest the inhibition of the resume speed of a vehicle in response thereto.

In addition, the Office Action correctly states that Kageyama does not specify resume speed. Thus, since Kageyama does not teach or suggest generation of a navigation signal from a navigation system, detection of a future path, generation of a predicted future path profile, and inhibition of the resume speed of the vehicle via an in-vehicle controller, claims 1 and 16 are novel, nonobvious, and are now in a condition for allowance.

Applicants therefore submit that each and every limitation of claims 1, 11, 16, and 19 are not taught or suggested by Kanazwa, Kageyama, or a combination thereof and are therefore novel, nonobvious, and allowable. Furthermore, since claims 2-10, 12-15, 17-18, and 20 depend from claims 1, 11, 16, and 19, respectively, they are also novel, nonobvious, and in a condition for allowance for at least the same reasons.

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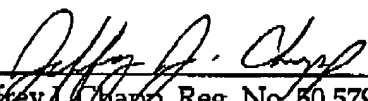
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In light of the amendments and remarks, Applicants submit that all objections and rejections are now overcome. The Applicants have added no new matter to the application by these amendments. The application is now in condition for allowance and expeditious notice thereof is earnestly solicited. Should the Examiner have any questions or comments, he is respectfully requested to call the undersigned attorney.

Respectfully submitted,

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